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STAFF ECONOMIC REPORT ON CORPORATE MERGERS

447 - 70

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Despite the advertising of the Beethoven devotees, this is not going to be the year of the Bicentennial, but rather the year of the Federal Trade Commission. The Nader Report and that of the American Bar Association last year deplored the Commission's efficiency and offered proposals for redirecting some activities and renewing vigor in others. This was merely the prelude, for this year Professor Posner, in the most recent University of Chicago Law Review, commends the agency for general lassitude on grounds that "one would be deeply concerned about an institution that pursued with skill, tenacity and dispatch the anticompetitive policies that are the Commission's stock-in-trade in both restraint-of-trade and deceptive practices areas" [37 U. Chicago Law Review 86 Fall 1969]. He offers hope for improvement only in eliminating entirely the administrative process in the Commission.

Most recently we have been presented not with another depressing diagnosis of Commission illness but -- in the form of the recently released Economic Report on Corporate Mergers by the F.T.C. Staff -- more than 740 pages of material showing very clearly the effects of multiple disease. The Merger Report is not the work of the Commission; the members only served as brokers passing it from their Bureau of Economics Staff to the Senate Antitrust Subcommittee, but they had the opportunity to certify the results. And they did certify, except in the case of Commissioner Jones, with the statement that "This Report represents a first step in providing the Commission and the Congress with factual information as to the broad contours of the conglomerate merger

movement, the financial and other forces propelling current merger activity, and the impact of the merger movement on the structure of the Economy", [Report, VIII]. But the Report is not such a first step, at least in the right direction, and the process of preparation and delivery of this misstep is a classic study in Commission achievement.

In response to a request for a summary of past research and for new findings, the resident staff in economic analysis in the Federal Trade Commission had only to report accurately the conclusions of the three dozen studies in the financial and economic magazines and journals. Their expertise offered the opportunity to go further -- to set standards for economic and statistical findings, and apply these standards to the article literature so that the Commission could weigh different statements in the recent work in their own policy formation. But this was not done. My impression is that the Bureau of Economics used its carte blanche from the Federal Trade Commission to make its own findings, in many instances from inferior data applied to partial and simplistic arguments, without elucidating and synthesizing the literature. The Staff went away with Commission resources and brought back "new research" that cannot meet minimum economists' standards for constructing analytical arguments and testing those arguments against statistical materials. The Federal Trade Commission and the Senate Committee now have a book that would certainly be rejected for publication on grounds of insufficient art as a treatise, and insufficient science as a research report.

This state of affairs raises some basic questions for the Trade Commission. To whom is the Economics Bureau responsible, if not to the (legal) Standards of the Commission or the (economic) publication standards of the academicians? How can the Federal Trade Commission act as a board of reviewers for new books in industrial economics? Should they do so? These questions are only those asked last year about staff quality and activity in the Federal Trade Commission -- but now about economists, a group with a language and attitude indecipherable to the Commissioner. The questions now have to do with basic issues of control and ultimately accountability of an expert economic staff to political appointees administering and making law.

The Claims Against Findings in the Merger Report

The Report offers a great number and variety of conclusions, many of which are scattered through the text and some of which are contradictory to the others. But there are six major conclusions in the "summary and highlights section" at the beginning of the Report which together explain increased concentration of assets in the largest 200 companies in the country. The "merger movement" accounts for this concentration in assets, and the six demonstrated reasons for merger include three that are hypothetical and three that are empirical. The hypothetical are (1) there are "numerous special reasons to grow by merger", such as tax, financial, and personal advantages (2) that "conglomerate-derived market power may be used to defend or expand the firm's position in ways inimical to competition" (3) the conglomerate form of organization "creates the

opportunity and incentive" to engage in reciprocal buying which in turn has the tendency "to entrench firms in dominant positions in highly concentrated markets". The statistical and case studies show (4) that the largest 200 companies in the country have acquired very profitable companies, with leading positions in their industries, and (5) the acquired companies have mostly operated in the "same broad industry group". Moreover, control has extended across company boundaries so that (6) the largest companies "are increasingly linked with other leading corporations through numerous management ties". The six conclusions do not fit together into factual statements; the hypothetical are only partly supported by the statistical or case studies, and the statistical findings themselves are not always and everywhere complete.

The Statistical Findings

First is the matter of the overall dimensions of mergers. There are numerous tabular summaries of growth and sales activities of merging companies throughout the Report. Regressions and correlations among aspects of corporate behavior have been calculated, reported, and used to come to statistical "summary sentences". As a whole, they show a greatly increased number of mergers, and in the size of total assets purchased by the acquiring firms, throughout the economy. This is not surprising, since there are more firms and assets now than there were in the 1940's and 1950's. There can be said to be a "wave of mergers" if there has been a systematic and long term shift in behavior of companies away from other means of

using assets towards buying other companies.

The incomes of companies, their stock issuances, and their borrowings add to their assets; how should they use these accumulations? They have chosen in the last few years to pay them out as dividends, and to hold them as cash in banks; but more than previously they have chosen to use their resources to invest in new plant and equipment, to lend to their consumers, and to merge with other firms. The magnitudes of these activities are shown in Table I; all have grown, but investing and lending and paying dividends have grown at faster rates than merging. There is no "wave of mergers" except as a ripple in the general wave of corporate financial activity.

Table I: Disposal of Income by All Corporations, 1953-1968

Year	Dividends	Cash Holdings	Investment in new plant and equipment	Loans to Consumers (trade credit)	Mergers and Acquisitions
1953	8.4	31.1	11.9	65.9	1.0
1954	8.9	33.4	11.0	71.2	1.8
1955	10.2	34.6	11.4	86.6	2.8
1956	11.0	34.8	15.0	95.1	2.8
1957	11.7	34.9	16.0	99.4	2.0
1958	11.6	37.4	11.4	106.9	1.4
1959	12.6	36.3	12.1	117.7	2.6
1960	13.4	37.2	14.5	126.1	2.3
1961	13.8	41.1	13.7	135.8	2.6
1962	15.2	43.7	14.7	144.2	3.0
1963	16.5	46.5	15.7	156.8	3.9
1964	17.8	47.3	18.6	169.9	3.7
1965	19.8	50.0	22.5	190.2	4.9
1966	20.8	50.1	27.0	205.1	5.4
1967	21.5	52.3	26.7	214.5	10.8
1968	23.1	56.1	26.4	235.6	15.2
annual rate of α in $y=\beta+\alpha t$	.964	1.597	1.043	10.882	0.595
R^2	.967	.952	.747	.978	.574

Note: all figures represent billions of dollars.

Source: Federal Reserve Bulletin, 1953-1968, and The Federal Trade Commission, Economic Report on Corporate Mergers, pp. 666-667.

Whatever the merger "movement", small increases in mergers by companies may have important anticompetitive effects that are now ignored by the courts.[1] The largest firms have grown appreciably in recent years, but the only source of growth was mergers [191]; but they have grown faster from internal investment if they were also most active in mergers [195]. These mergers were the source of growth, while at the same time mergers were related to internal growth. The arithmetic here is somewhat arbitrary -- the acquired firm is assumed to grow at the all-industry rate of growth after acquisition, but that later growth is credited to assets accumulated or received during the merger. Given that the most vigorous growers were the most active acquirers, and some of the purchased firms were in inactive industries, then part of the growth of acquired assets after merger must be due to the policies of and affiliation with the acquiring firm. This part of growth -- from the acquiring firm's internal efficiency -- is not accounted for here. It is not possible to say more than that the largest 200 firms exhibited an active merger policy, which contributed to their growth.

Of more interest is the type of firms these companies purchased. The purchased firms were leading firms in highly concentrated five digit industries in many cases: 190 companies purchased before 1968 held 88 "leading firm positions" in five digit industries with concentration ratios greater than 60 per cent [240]. These purchased firms

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1 One of the problems with the factual materials of the Merger Report is that there are four samples of firms that are analyzed ((1) all mining and manufacturing firms (2) the 200 largest manufacturing firms (3) a selected group of conglomerate firms (4) the 25 firms most active in mergers) and the conclusions that hold for one sample are merged with those for another to form an overall impression. This makes problematical any cause-effect argument on mergers generally.

were "financially successful before merger" [241], and 80 per cent of them were in the same 2-digit industry group as the buying firm [242]. The impression from these "statistical summary statements" is that of accumulation of controlling (highly profitable) firms in related industries.

But this impression seems based on only an initial, glancing review of the statistical materials. What are the economic implications from having a "leadership position" in a five-digit industry? For example, can the leading firms control the supply and set the price of "thin" sheet glass (a five-digit class of product in the two-digit "stone, clay, and glass" industry), given that heavier grades of sheet and thin grades of "plate and float" glass are produced or imported by other firms for buyers using varying proportions of these five-digit grades? The answer is probably no -- but not certainly so.[1] Second, how "financially successful" were the firms purchased by the 200 largest companies? A sample of firms bought by the largest companies showed slightly lower rates of return before merger than the rates of all merged firms for the period 1950-68 [691]. One might believe that the big companies were poor choosers, but there is no indication of how well the combined companies did after merger, as compared to before -- and they should have done better, if the mergers had added to control

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[1] Given the wide variety of standards used by the Bureau of Census to define five-digit classes and great differences of opinion among economists as to the efficacy of substitution or "product rivalry" for preventing control of prices.

of prices across related markets.[1] Third, there must be difficulty in finding the extent of "inter-relatedness" resulting from the merger activities of the largest companies. To what extent are the acquiring and acquired firms "related" if they are in the same two-digit industry but not in the same three, four, or five-digit industries? The answer must vary greatly from case to case, but generally the similarities of technology are going to be more apparent than commonality in demand conditions. The glass producer buying the concrete manufacturer (SIC class 32) finds that the transportation problems of the two companies are similar, and then later he notices buyers substituting glass for concrete. Then the impression may be, as the Merger Report says, "For reasons of technology as well as competitive advantages, firms seek to broaden their base of specialization by entering economically related activities" [244; emphasis added]. That is to say, there could be economies of larger scale company here. This might hold for joint ventures and other such contractual relations among companies, as well; but because we do not know whether they mostly occur in the same two-digit classes, we cannot say [cf. pp. 198-205].

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[1] But the comparison is not entirely appropriate when it is limited to mergers of small versus large acquiring companies, if all mergers involve more profitable companies and lead to greater profits after merger. To consider this possibility, the Merger Report reader has to turn to scattered findings from the data on all mergers of mining and manufacturing firms. All mergers involve acquired firms which are on average either more profitable than non-acquired firms (57), or equally profitable (97). The firms do not on average do better after completion of the merger (101). Because of conflicting findings, and no measures of statistical significance, the all-merger data contains no additional information.

There are many more bits of factual information in the Merger Report that must be added to the Staff's own conclusions, to complement those items that are incomplete or impenetrable. The largest companies may or may not have made more profits after mergers, but they did produce in industries that experienced rising concentration [234]. The statistical technique used here probably produced a spurious relation.[1] The largest companies seem to have become more diversified over time [221]. This statistical finding has been contradicted by other, more penetrating research.[2] It would be important for measuring anti-competitive effects to conclude that the mergers consummated by these companies lead to increased concentration and diversification both but here is where complementarity of

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1 Since this finding is most important for weighing the possibility of anti-competitive effects, it deserves more attention than some of the others. It follows from the regression equation in Appendix Table 4-4 [690] where changes in four firm concentration ratios 1947-1966 are regressed on (a) percent of value added by top 200 companies (b) beginning level of concentration (c) industry growth (d) high and moderate product differentiation. On average, concentration in the sample of 55 (four digit?) industries went down 2.29 points in that period; but the higher the percent for the top 200 and the lower the initial concentration, the greater the increase in concentration. This is not plausible, because the top 200 were generally responsible for the initial concentration; according to the Merger Report, "in industries where the four leading companies made over 75 percent of total shipments, companies among the 200 largest of 1963 did 87 percent of the business" [214], but only 63% of the business in industries with concentration ratios from 51% to 75%, and only 31% of the business when the concentration ratios were from 26% to 50% [215]. The two "independent" variables (a) and (b) are very likely so highly correlated with each other that the regression coefficients are spurious. At least tests for multi collinearity are required to dispel the suspicion that the "independent" variable first in the regression gets the positive coefficient.

2 "Diversification" is measured by number of 2-5 digit classes engaged in, both in 1960 and 1968. But "engagement" may not be a substantial commitment (Professor Berry at Princeton argues that the important characteristic is the relative amount of assets in diverse industries, for example). Using an index of production dispersion, Berry finds that the increase in diversification by the largest companies was relatively small 1960 to 1965 and not "conglomerate" in nature. Cf. C. H. Berry, "Corporate Growth and Industrial Diversification" (Mimeo, 1969).

argument is important. This would require belief (a) that merger was the single means of growth, (b) that concentration increased following the mergers, (c) that mergers put the large firms actively into diverse markets. Everything said above points to serious statistical difficulties in the way of each such step.

The Three Hypothetical Conclusions

Rather than making empirical statements it might be more appropriate to use the statistical information to establish the plausibility of any of the three hypothetical conclusions in the *Merger Report*. More or less complete evidence on statistical regularities can be arrayed next to possible "reasons" for conglomerate mergers, in hopes that one or the other rationale can then serve as the basis for another more complete round of research and policy investigation.

The "tax" and "financial" reasons for merger are both too much and too little with us. The mere statement that some wealth holders gain from a merger is to note that for every purchase there is a sale; but has there been a systematic preference for merger as a form of company expansion because tax loopholes add to stockholders' profits, or because procedures for accounting for merger add to the *illusion* of stockholders' profits? The statistical materials would support an affirmative answer if they showed stockholders' profits from mergers, or preference for mergers. *A number of sophisticated tests of stock price series show that in general mergers do not increase stock prices.* The special reasons do not seem to have general importance.

Some stockholders can gain from conglomerate merger over other uses of assets, without evidence of their gains in the form of rising stock prices. The *Merger Report* does not note this possibility. These

people would be owners of companies -- presumably smaller, self-made firms -- who have a very large share of their assets in the stock of that one "owner-managed" firm and who wish to trade these shares for a balanced portfolio of securities. They should sell out to a conglomerate, since the buyer can offer them a reasonably-balanced portfolio of industry assets without capital gains taxation of the sale of their old shares. If there were a merger, the traded stock of the acquired firm would not reflect these gains (since these shares are sold or bought by "other" stockholders besides the insider). Since systematic security price gains from mergers have not been found in the statistical studies [101], the non-finding is consistent with this "good reason" for conglomerate merger. But there are other troublesome findings. Why have the purchasing companies failed to experience rising stock prices as well; only because in the bargaining for merger they have not won any part of these tax gains away from the insider in the acquired firm? Last of all, does this characterization of the seller as "owner-manager of the self-made firm" describe the decision maker in the big 1960-1970 mergers well?[1]

The hypothetical argument for merger as the means for extending conglomerate power is found throughout the Merger Report, but seems to me to be centered on the possibility of new merger-related gains from predatory pricing. It is stated that "By using monopoly profits in one area to subsidize operation in a competitive area, a firm may force competing companies to choose between bankruptcy and consolidation" [401].

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[1] Part of the answer is "not entirely unwell". The "all mergers" series shows that the class of companies acquired most completely had assets from $10 million to $25 million (the smallest class investigated, 47).

Has this been both the cause for and the results of recent mergers? The acquired companies may not have been more profitable than most (a question of statistical dispute) but they most certainly were not at the point of bankruptcy. The acquiring companies did not make more money after merger, as expected from "peace breaking out" after general price warfare had ceased with the merger; and the acquiring companies bought "market leaders" so as to grow through them ("most of growth was by merger") rather than first growing by undercutting other companies and then merging with the starvation-wracked remains of those companies.

Perhaps they merged and then used the monopoly profits of the leading firms to wage price wars of attrition against other firms in these diverse industries [401]. The statistical materials that support this argument are very, very difficult to deal with since they support so many other pro-competitive arguments. (Price wars of attrition to some companies are effectively competitive market actions to some economists.) What there is in the statistical materials in the Merger Report is not conclusive.[1] There is no evidence on the existence of extensive monopoly profits in the control of the largest 200 companies; there is no plausible basis for even centering attention on the profits

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[1] These materials do not include the case studies on price wars in Chapter 6 dealing with the local price cutting activities of Safeway Company, Anheuser-Busch, and Kraft Foods. These seem to be local pricing activities of three national companies inserted into the Merger Report record at this point to rebut the assertion that price wars are "uneconomic" and thus can never happen. But, except in the National Dairy purchase of a jelly company, they bear no obvious relation to the cause for and effects from the mergers of large companies in the 1960's. Or should a general case be made on the sales of jams and jellies by the Kraft Foods Division of National Dairy Company?

of these companies since the next 200 companies clearly have access to sources of wealth (particularly in mineral and land resources) which provide money "in one area to subsidize operations in a competitive area" [401; read "money" for "monopoly profits"]. There is no indication that the general price wars have started; at least there is no material in the *Merger Report* showing that the largest firms have been making *less* money during and since their 1962-68 growth by merger. But concentration has increased in their industries (a statement well worth statistical dispute). These bits and pieces of statistical statements suggest that profitability and concentration changes may have been unrelated -- as at the *very first and undetected* stage of a general war of attrition waged by conglomerates against others, or as at the *first and last stages of faster growth by "better managed" and "larger" firms in competitive industries.*

The last hypothetical reason for merging across industries is to practice reciprocity, given that "reciprocity introduces into the competitive process a distracting and potentially destructive factor" [328]. The *Merger Report* argues that the *I buy from you if you buy from me* arrangements dampen rivalry based on price, raise the barriers to entry, enable firms to manipulate the demands for their products [329,330]. The practice may have these results -- the logic of the argument is not provided in the *Merger Report*[1] -- but it also

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[1] This reader's puzzlement follows from treating reciprocal trade as similar to barter in a world of money transactions. Companies that do not calculate the implicit exchange rate in reciprocal transactions, and do not trade at that implicit rate equal to the money rate, then make mistakes. But why should the implicit rate *be a better means by which to establish* a monopoly?

seems clearly a way of offering price cuts that other oligopoly firms cannot detect very well. Whatever the results, does reciprocity provide the reason for big firm mergers? The answer must point to information on use of this practice by the merged firms; there have been some antitrust cases against conglomerate firms for using reciprocity, but no information collected by the F.T.C. staff on its general use in relation to mergers by the large 200 companies. Moreover, the General Dynamics and American Standard cases used as "examples" in the Report show the ambivalence of occurrence and effect in the use of reciprocity. Both of these companies were involved in collusive price setting of one of the goods being traded reciprocally and it would have been to their advantage not to cut price directly (neither case provides enough information to tell whether the companies used reciprocal trading to cut price indirectly; 341-372). Most disquieting was the response of one of the buyers "pressured" for more reciprocal purchases: the buyer "was so tied up by [the seller's] competitors with greater leverage that it was 'ridiculous [to] expect more than just fair or impartial treatment ... when we secure some business from Wachovia we secure it just like we would a school, we meet specifications and get competitive'" [358]. The large number of mergers of conglomerate firms has now taken reciprocity gains to zero at the margin?

A book by committee should be read by another committee of experts on sources of theory and data, and then critiqued line by line for logic and quality of evidence. But the whole still has to be greater than the sum of its parts, so that the single reader goes away with the impression that the general trend of evidence shows mergers as pro- or

anti-competitive. This Merger Report is so scant in evidence, and the evidence so weakly supports the "reasons", that this committee of one sadly concludes that we do not know the competitive effects from large conglomerate mergers.

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